

# HZ-116C

Shipped in packet-tape reel(2,500pcs per reel)

Notice : It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

## ●Absolute Maximum Ratings

Item	Symbol		Limit	Unit
Max. Input Current	$I_c$	25°C Const. Current Drive	17	mA
Operating Temp. Range	Topr.		-40 ~ +125	°C
Storage Temp. Range	Tstg.		-40 ~ +150	°C



## ●Electrical Characteristics(T<sub>a</sub>=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Output Hall Voltage	$V_H^{**}$	Const. Current Drive B=50mT, $I_C=5mA$	24		33	mV
Input Resistance	$R_{in}$	B=0mT, $I_C=0.1mA$	240		360	Ω
Output Resistance	$R_{out}$	B=0mT, $I_C=0.1mA$	240		360	Ω
Offset Voltage	$V_{os}(V_U)$	B=0mT, $I_C=5mA$	-2.5		2.5	mV
Temp. Coefficient of $V_H$	$\alpha V_H^{**}$	B=50mT, $I_C=5mA$ T <sub>a</sub> =25~125°C	-0.07		-0.11	%/°C
Temp. Coefficient of $R_{in}$	$\alpha R_{in}^{**}$	B=0mT, $I_C=0.1mA$ T <sub>a</sub> =25~125°C	0		0.2	%/°C

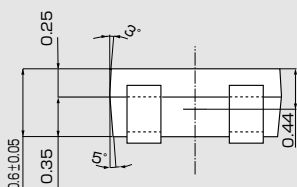
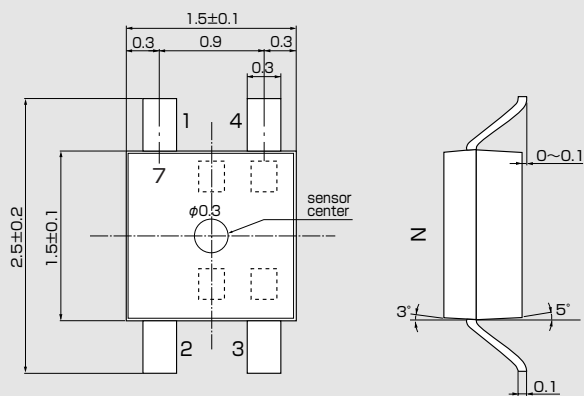
Notes : 1.  $V_H = V_{HM} - V_{os}(V_U)$  (VHM: meter indication)

2.  $\alpha V_H = \frac{1}{V_H(T_1)} \times \frac{V_H(T_2) - V_H(T_1)}{(T_2 - T_1)} \times 100$

3.  $\alpha R_{in} = \frac{1}{R_{in}(T_1)} \times \frac{R_{in}(T_2) - R_{in}(T_1)}{(T_2 - T_1)} \times 100$

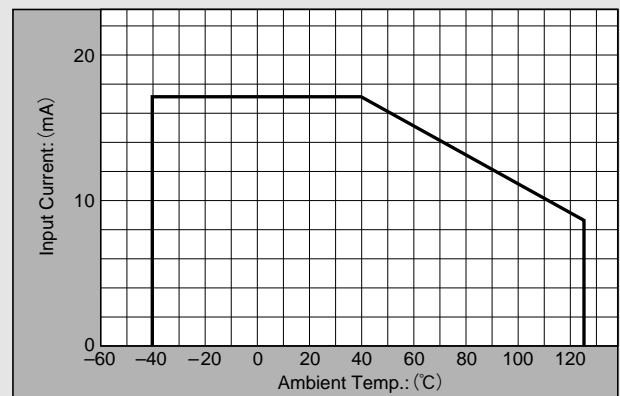
T<sub>1</sub> = 25°C, T<sub>2</sub> = 125°C

## ●Dimensional Drawing(Unit : mm)

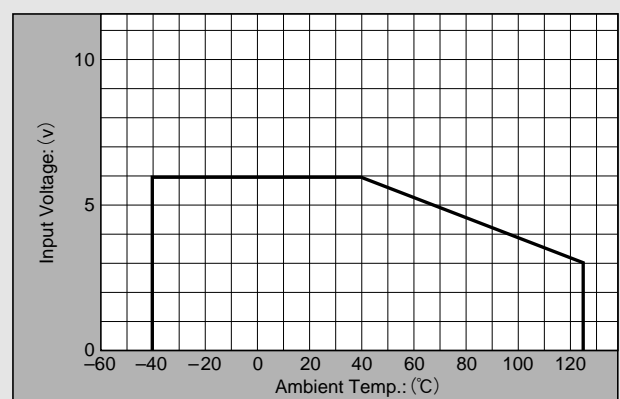


Pinning		
Input	1 (±)	3 (〒)
Output	2 (±)	4 (〒)

## ●Input Current Derating Curve



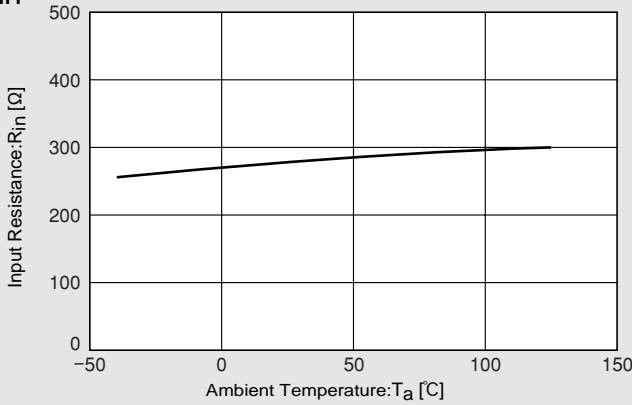
## ●Input Voltage Derating Curve



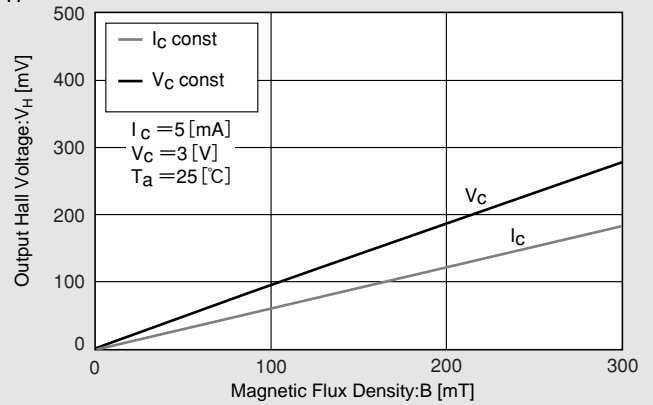
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- Handling precautions required for preventing electrostatic discharge.
- This product contains gallium arsenide (GaAs). Handling and discarding precautions required.

●Characteristic Curves

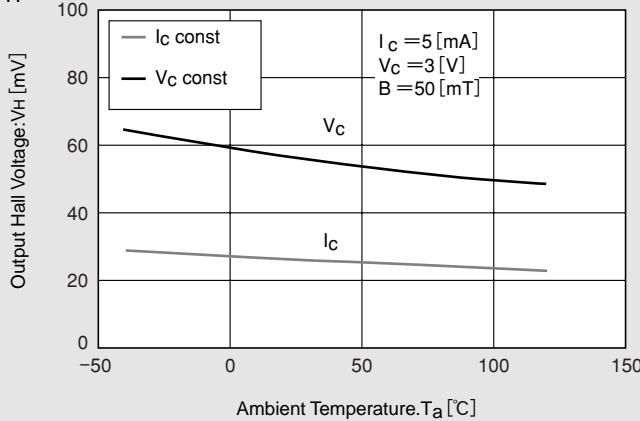
$R_{in}$ -T



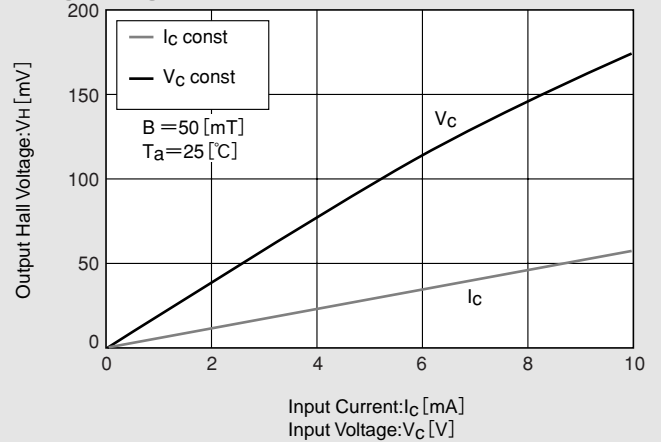
$V_H$ -B



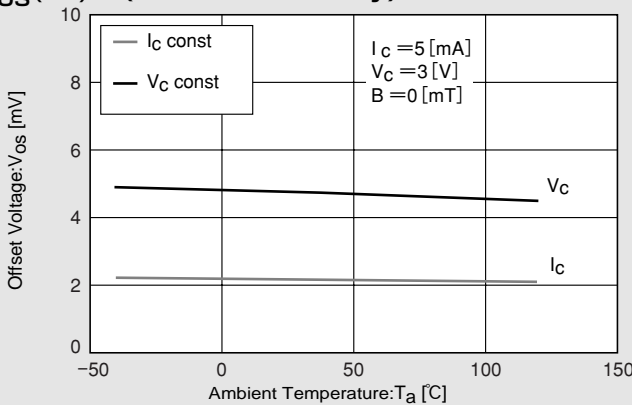
$V_H$ -T



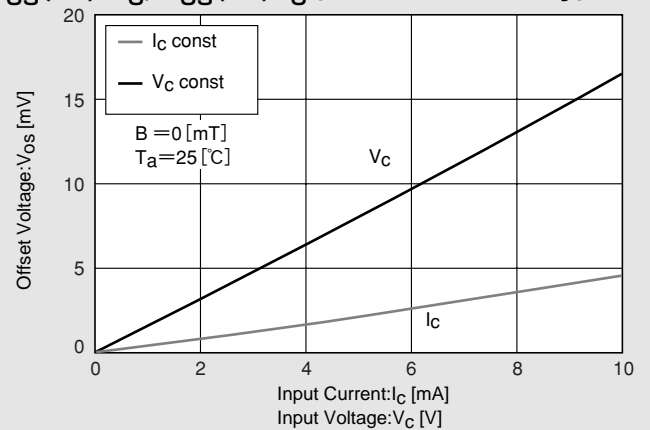
$V_H$ - $V_C$ ,  $V_H$ - $I_C$



$V_{OS}(V_u)$ -T (For reference only)



$V_{OS}(V_u)$ - $V_C$ ,  $V_{OS}(V_u)$ - $I_C$  (For reference only)



※Magnetic Flux Density  
1 [mT] = 10 [G]

in This Example:  $R_{in} = 275$  [Ω],  $V_{OS} = 4.7$  [mV] [ $V_C = 3$  [V]]

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June 2, 2010